

**Notice of Allowability**

Application No.

10/806,071

Applicant(s)

KOJIMA ET AL.

Examiner

Art Unit

Jimmy H. Nguyen

2629

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/22/2004.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

***REASONS FOR ALLOWANCE***

1. The following is an examiner's statement of reasons for allowance: the claimed invention is directed to a liquid crystal display control circuit performing drive compensation for high-speed response. Independent claims 1 and 10 identify the uniquely distinct features, “a conversion table for ... corresponding to a combination of significant bits of the image data of the current frame ... previous frame” (see lines 9-13 of claim 1 and lines 10-14 of claim 10) and “said conversion table ... the first data” (see last 9 lines of claims 1 and 10). Independent claims 4 and 11 identify the uniquely distinct features, “a conversion table for ... corresponding to a combination of significant bits of the image data of the current frame ... previous frame” (see lines 9-13 of claim 4 and lines 10-14 of claim 11) and “said interpolation operation section ... the first data or not” (see last 11 lines of claims 4 and 11). Independent claims 8 and 12 identify the uniquely distinct features, “said conversion table including a first conversion table ... driving data” (see last 12 lines of claims 8 and 12). The closest prior art, Suzuki et al. (US 6,833,886 B2), which discloses a related LCD control circuit (see Fig. 1) comprising a display drive data generation unit 12, for generating display drive data (Fo) corresponding to a combination of image data (Fi) of a current frame and post driving status data (Fp) of a previous frame, comprising a correction value conversion table (42) (see Fig. 3) for storing compensation data ( $\Delta o$ ) corresponding to a difference between the image data (Fi) of the current frame and the post driving status data (Fp) of the previous frame (see col. 5, lines 16-23); an interpolation operation calculation unit (46) for generating interpolation compensation data by performing an interpolation operation for the compensation data which is read from the correction value conversion table according to a combination of the lower (insignificant) bits of the image data

Art Unit: 2629

(Fi) of the current frame and of the post driving status data (Fp) of the previous frame (see Fig. 3, col. 7, line 62 through col. 8, line 1); and a post drive level calculation unit (46) for outputting the corrected display drive data (Fo) to LCD panel (see Fig. 3), either singularly or in combination, fails to anticipate or render the above underlined limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is 571-272-7675.

The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/806,071

Page 4

Art Unit: 2629

A handwritten signature in black ink, appearing to read 'JH Nguyen', with a long horizontal flourish extending to the right.

JHN  
August 31, 2006

Jimmy H. Nguyen  
Primary Examiner  
Technology Division: 2629